

AMENDMENTS TO THE CLAIMS

This listing of the claims replaces all prior claims previously submitted.

1. (Currently Amended) A method for generating a stream of video images such that in ~~each current image~~, a preregistered picture is superimposed on a predetermined area of a moving object in a plurality of video images, the method comprising:

~~providing, with a calculator, receiving~~ a first set of computer generated oriented views of the preregistered picture in various orientations at a video receiver before the plurality of video images is received;

associating each computer generated oriented view of the first set of computer generated oriented views with an orientation index that identifies the physical orientation of the computer generated oriented view of the preregistered picture;

storing, in a machine-readable medium, the first set of computer generated oriented views and the associated ~~with each~~ orientation index;

receiving orientation and position data for the moving object, the orientation and position data captured by a sensor attached to the moving object;

receiving position data for a camera that captured the plurality of video images ~~each current image~~;

determining in each of the plurality of video images ~~current image~~ a location, an orientation and a size of said predetermined area of said moving object, wherein the orientation is determined using the orientation and position data for the moving object and the position data for the camera;

selecting, from orientation indices associated with the stored computer generated oriented views, the orientation index of the computer generated oriented view having the same orientation as said predetermined area of said moving object ~~in the current image~~; and

~~for each current image~~, using the selected orientation index along with information on the location and size of said predetermined area of said moving object to superimpose the preregistered picture on the plurality of video images to generate the stream of video ~~each current image~~.

2. (Currently Amended) The method of claim 1 further comprising:
providing a second set of views of a second preregistered picture, corresponding to said first set of computer generated oriented views; and
for each current image:
extracting the orientation index and the size and location information;
selecting, from said second set of views, an oriented picture in accordance with the orientation index;
computing a scaled picture on the basis of said size information; and
superimposing said scaled picture ~~in the current image~~ at a location corresponding to the location information.
3. (Currently Amended) The method of claim 2, in which at the beginning of a TV program to be transmitted, said second set of views is downloaded in the video receiver[[s]].
- 4.-6. (Canceled).
7. (Original) The method of claim 2, in which the content of said second set of views depends upon the geographic broadcasting zone.
8. (Original) The method of claim 1, in which the location and orientation information in a current image are calculated for a reference point of the object.
9. (Original) The method of claim 1, in which, in a current image, the location, orientation and size of an object are provided in a differential way with respect to a former image.
10. (Original) The method of claim 1, in which static points of an image are localizable to detect when a new object comes into a next image.

11. (Currently Amended) The method of claim 1 using shape recognition tools to detect the presence of the moving object ~~in the current image~~ on the basis on a stored geometrical representation.

12. (Currently Amended) A system for generating a stream of video images to be broadcasted such that, at the reception, ~~in each current image~~, a preregistered picture is superimposed on a predetermined area of a moving object, the system comprising:

at least one input for video images;

~~a memory storing a calculator for providing a set of computer generated oriented~~
views of said picture for various orientations and associating with each computer generated oriented view an orientation index that identifies the physical orientation of the computer generated oriented view of the preregistered picture associated with the corresponding orientation index, ~~wherein ;a memory for containing said set of computer generated oriented views is received before the video images;~~

an estimator of the location, orientation and size of said predetermined area of said moving object in each video current image;

a selector for selecting, among said set of computer generated oriented views, an oriented picture having the same orientation as said predetermined area in the video current image as determined from orientation and position data captured by a sensor attached to the moving object and camera position data, ~~and selecting the associated orientation index;~~ and

a generator of a video stream in which each video current image containing said area is attached to the selected orientation index along with the location and size information of said area.

13. (Currently Amended) The system of claim 12 further comprising:

a video receiver adapted to receive images comprising:

~~the memory for containing the set of oriented views;~~

an extractor for extracting from said memory an oriented picture on the basis of the orientation index attached to each video current image of the video stream; and

a calculator for providing a scaled picture on the basis of the size information attached to each video current image in the video stream, and for superimposing said scaled picture in the video current image at the location corresponding to said location information.

14. (Currently Amended) The method of claim 15, in which a second set of views contains picture frames of same orientation of said first set of computer generated oriented views, with a picture content.
15. (Currently Amended) The method of claim 1, in which said first set of computer generated oriented views contains only picture frames.
16. (Currently Amended) The method of claim 1, further comprising:
superimposing, with a video receiver, the computer generated oriented view having the same orientation as said predetermined area in the video current image.
17. (Currently Amended) The method of claim 1, further comprising:
superimposing, with a video production mixer, the computer generated oriented view having the same orientation as said predetermined area in the video current image.
18. (Currently Amended) The method of claim 1, further comprising:
displaying a video image comprising an oriented view having the same orientation as said predetermined area in the video current image ~~superimposed on the current image.~~
19. (Cancelled)
20. (Currently Amended) A method for transmitting a stream of video images such that a preregistered picture can be superimposed on a predetermined area of a moving object depicted in the stream, the method comprising:

providing, with a calculator, receiving a first set of computer generated oriented views of the preregistered picture in various orientations;

in advance of transmission of the stream of video images, transmitting each computer generated oriented view of the first set of computer generated oriented views in association with an orientation index that identifies a physical orientation of the oriented view of the preregistered picture; and

for each video image of the stream of video images:

determining location, orientation and size of the predetermined area of the moving object in the video image as determined from orientation and position data captured by a sensor attached to the moving object and camera position data;

selecting, from the orientation indices associated with the first set of computer generated oriented views, an orientation index corresponding to an orientation of the predetermined area of the moving object in the video image; and

transmitting the video image along with the selected orientation index, the determined location and the size of the predetermined area of the moving object in the video image.

21. (Previously Presented) The method of claim 20, further comprising:

transmitting a polygon representation of an obstruction with the video image and the selected orientation index.

22. (New) A method of superimposing a preregistered picture on a predetermined area of the image of a moving object in a plurality of video images, the method comprising:

receiving and storing in a memory a set of computer-generated views of a preregistered picture each associated with a unique orientation index identifying the physical orientation of the corresponding computer-generated view; and

superimposing on each of said video images, each being received with a corresponding orientation index, the computer-generated view having the same orientation index, at a location and scaling indicated by size and location information transmitted with each video image.
